



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/091,337

03/06/2002

Yusuke Mizuno

742406-13

7055

78198

7590

04/14/2009

Studebaker & Brackett PC  
1890 Preston White Drive  
Suite 105  
Reston, VA 20191

EXAMINER

NEWLIN, TIMOTHY R

ART UNIT

PAPER NUMBER

2424

MAIL DATE

DELIVERY MODE

04/14/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



## **DETAILED ACTION**

### ***Response to Arguments***

As noted by Applicant, the reference to Dunn was in error. Rather, Hoffert, US 6,370,543 was relied upon in the rejection and should have been cited in the rejection heading. The correct references appear in the heading below.

Applicant's arguments have been fully considered but they are not persuasive. The Examiner agrees, as pointed out by Applicant and evidenced in the Interview Summary mailed 10/1/2008, that the claims distinguish over Russo taken alone. However, the Examiner does not agree that this acknowledgement is inconsistent with Russo suggesting the desirability of allowing a free preview of pay-per-view content. In paragraph 44, Russo states that "the mere selection of a program for viewing may not instantly result in a charge," and that a warning may appear to let the user know the amount of time remaining before a charge will be incurred. Clearly this suggests that a user may wish to preview a program before deciding that it is worth purchasing. Russo therefore suggests the desirability of a free preview period even though the "preview" of Russo is not exactly the same as the Applicant's recited preview.

Hoffert, on the other hand, does teach a selectively assembled preview. The Applicant argues that Hoffert is different from the claimed invention because it creates previews of multimedia information that can be found with a search engine. The present claims recite that the preview is created from "received content." However, the Examiner sees no significant distinction between multimedia content that is received at

Art Unit: 2424

a subscriber site and that which can be accessed via a search engine. As cited below in the rejection, Russo teaches the components to receive multimedia content from a television infrastructure, and Hoffert teaches how that content can be processed to create a selective preview.

Applicant also asserts that the claims distinguish over Hoffert since the multimedia files in Hoffert are accessible at any time, rather than pay-per-view. Again, it is the combination with Russo that provides the teaching of pay-per-view content. Given that Russo involves pay content with a free preview period, one of ordinary skill would recognize that the preview creation in Hoffert could be applied to pay content in order for users to evaluate not only the beginning (as in Russo), but selected portions of the content before deciding to finalize a purchase.

Finally, Applicant argues that Russo and Hoffert are different and in unrelated arts, to the point that they are not combinable. Examiner disagrees. Both references allow users to navigate and view multimedia content of interest. In Hoffert, the media content is searched while it is still resident on an external network; Russo, on the other hand, searches content after it has been downloaded to local storage. Regardless, both references allow users to search content using attributes of interest such as subject matter, length, etc. Moreover, both references explicitly provide a preview so that users may decide what content is of sufficient interest to warrant further commitment, whether it is purchase money or merely viewing time.

For the reasons above, the Office is of the view that the combination of the two references teaches all of the claimed elements and that Russo provides a suggestion

Art Unit: 2424

that the selective preview of Hoffert could be offered for free before charging for pay content. The rejections are therefore maintained.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-25, 27-30, 46-41, and 43-44 are rejected under 35 U.S.C. 103(a) as obvious over Russo, US 2004/0123323 in view of Hoffert, US 6,370,543.

3. Regarding claims 1, 2, and 43, Russo discloses a storage-type receiving device and method comprising:

a receiving part for receiving a content being transmitted **[tuner 104, Fig. 2; paras. 19, 29]** ;

a storage part for storing the content **[storage 110, Fig. 2; paras. 15, 32, 46]**;

a control part **[central controller 150, Fig. 2; para. 31]**; and

a restoring part for restoring the content received with the receiving part and/or the content stored in the storage part in accordance with control of the control part **[the compressor/decompressor 112 restores content from storage based on controller 150, Fig. 2; paras. 33, 34]**;

Russo describes a previewing function, but does not "selectively" retrieve and store scenes **[system may make available different storage areas for program and preview information, and system determines whether content is a preview or pay-per-view and outputs/stores accordingly, paras 44-46]**. Hoffert teaches a previewing system wherein the control part at least controls the restoring part, and the control part comprises:

a storage control portion for judging whether or not each content is a pay-per-view content when each content is received **[e.g. col. 26, 60-66]**, for controlling the restoring part to select portions from the content received that are predetermined as previewable **[cols. 19-20, ll. 32-59; system determines whether content is seekable, whether a media preview is available, etc., cols. 25-26, ll. 4-58]** and to create a preview when the content is judged as a pay-per-view content and for selectively storing preview of a pre-viewable pay-per-view content selected from the transmitted content in the storage part **[col. 8; content previews are stored, col. 7, 42-52; step 422, Fig. 4C]**; and

a playback control portion which reads out the preview stored in the storage part and playback and outputs the preview **[step 423, Fig. 4C, step 432, Fig. 4D; cols. 19-20, ll. 53-11]**.

In addition to disclosing the various hardware elements as described above, Russo allows a user to select criteria for automatic recording, such as genre, cast, or other user preferences **[paras. 13, 21, 40]**. Russo also suggests the desirability of a preview function that allows users to preview content without incurring a charge. Given

Art Unit: 2424

these functions of Russo, it would have been obvious to one of ordinary skill that Russo could be modified to take advantage of the more sophisticated metadata and preview creation taught by Hoffert. As Hoffert states, "it is desirable to not only search the lexical content surrounding a media file, but also to search the content of the media file itself." **[col. 7, 60-64]**. Using the previewing capability of Hoffert allows users to focus on the portions of a video they want to see, rather than wasting time and manual effort skimming through an entire full-length content.

4. Claim 4 recites the same substantive limitations as claim 1, all of which are addressed above. Russo discloses the added limitation of a computer program embodied on a computer readable medium **[central controller 150, Fig. 2; para. 31 alternatively, controller 10, Fig. 1, para. 17]**.

5. Regarding claim 5, Hoffert discloses a receiving device wherein the playback control portion selects and playbacks a desired preview out of a plurality of previews being stored in accordance with a command for playback the preview from a user **[user can select particular previews from a filmstrip, Figs. 4A and 4B, col. 23, 2-25]**.

6. Regarding claim 6, Hoffert discloses a receiving device wherein the control part conducts one of recording information for specifying the preview selected by the playback command provided by the user and outputting such information to outside thereof **[cols. 22-23, ll. 65-25]**.

7. Regarding claim 7, Hoffert discloses a receiving device wherein the playback control portion selects and playbacks a desired preview out of a plurality of previews being stored while the control part performs control in response to another command differ from the playback command **[user clicks to begin playback of desired clip, while results are returned from server based on search command, col. 23, 8-25]**.

8. Regarding claim 8, Hoffert discloses a receiving device wherein the command differ from the playback command is a command for displaying a program table created in accordance with a category search, and wherein the playback control portion selects and searches a preview belonging to the category to be searched as a desired preview under the different command **[user can execute category search, e.g. talk show or action film, col. 8]**.

9. Regarding claim 10, Hoffert discloses a receiving device wherein the control part controls the restoring part so that the restoring part previously reads out part of each content in a plurality of contents alone as a preview and outputs the preview to the storage part in parallel to a process for restoring a signal from the receiving part into a content with the restoring part and output it to the storing part **[cols. 22-23, ll. 65-25]**.

10. Regarding claim 11, Hoffert discloses a device wherein the storage control portion controls so that only a preview in a content, which complies with a condition for



Art Unit: 2424

storing the preview specified by a user is output to the storage part **[previews are stored based on condition specified by user, col. 19-20, ll. 53-8]**.

11. Regarding claim 12, Hoffert discloses a device wherein the storage control portion conducts one of recording a condition for storing the preview provided by the user and outputting the condition to outside thereof **[col. 8; cols. 19-20, ll. 53-8]**

12. Regarding claim 13, Hoffert discloses a device wherein the condition for storing the content is a specific category of content **[col. 8]**.

13. Regarding claim 15, Russo discloses a device wherein the control part performs the following steps when a command for subscribing a specific pay-per-view content from a user is received;

detecting at when the subscription command is received whether or not a lapsed time from the beginning of the pay-per-view content which is received and output with the receiving part is longer than a time period for playback of preview of the pay-per-view content stored in the storage part **[para. 44]**, and

storing the pay-per-view content into a temporary storage part capable of storing a content having a longer playback period than the lapsed time and playback, and playback the pay-per-view content stored in the temporary storage part while playback the preview stored in the storage part when the time period for playback is longer than

Art Unit: 2424

the elapsed time **[both the preview period and the content itself is played back from storage, paras. 44-46].**

14. Regarding claim 16, Russo discloses a device wherein the control part performs the following steps when a command for subscribing a specific pay-per-view content from a user who views preview of the pay-per-view content is received;

detecting at when the subscription command is received whether or not the pay-per-view content is currently transmitted in accordance with information on programs received **[paras. 42, 44],**

storing the subscription command of the pa-per-view content when no transmission is currently conducted, and determining whether or not the pay-per-view content corresponding to the stored subscription command is in an on-air schedule whenever information on programs are updated, and outputting a display which shows that the pay-per-view content will be on-aired when the pay-per-view content is in the schedule **[controller utilizes future schedule information and determines whether content is available for download or preview, para 40].**

15. Regarding claim 17, Russo discloses a device, the device further comprising a communication part for communicating with a content provider's device via a communication line **[tuner 104, Fig. 2]**, wherein the control part performs the following steps when a command for subscribing a specific pay-per-view content from a user who views preview of the pay-per-view content is received;

detecting at when the subscription command is received whether or not the pay-per-view content is currently transmitted in accordance with information on programs received **[paras. 42, 44]**, and

transmitting by communication part the subscription command of the pay-per-view content to the content provider's device when no transmission is currently conducted **[transmission device receives subscription commands, para. 42, 43];**.

16. Regarding claim 18, Russo discloses a device wherein the control part outputs an indication by which a content of its previews being stored in the storage part can be distinguished from other contents during restoration of information on programs which is received **[controller distinguishes between pay-per-view and preview contents, paras. 44, 46; supplemental information is also distinguished, para. 37]**.

17. Regarding claims 19 and 20, Russo discloses a device wherein the storage control portion deletes a preview stored in the storage part in order of longer duration of storing to store a new preview when the new preview can not be stored in the storage part **[stored content may be deleted to free up space, para. 45; also see para. 21 for controller storage management and erasure]**.

18. Regarding claim 21, Russo discloses a device wherein the storage control portion deletes a preview which has been playback to store a new preview when the new preview can not be stored in the storage part **[stored content may be deleted to**

Art Unit: 2424

**free up space, para. 45; also see para. 21 for controller storage management and erasure].**

19. Regarding claim 22, Russo discloses a device wherein the storage control portion deletes a preview corresponding to a content which has been playback according to a command from a user to store a new preview when the new preview can not be stored in the storage part **[stored content may be deleted to free up space, para. 45; also see para. 21 for controller storage management and erasure].**

20. Regarding claim 23, Russo discloses a device wherein the control part judges whether or not a content corresponding to a preview can currently be received while the preview stored is playback, and stores the content in a temporary basis when the content can be received **[controller 10 performs storage management and provides for the periodic erasure of programs, para. 21].**

21. Regarding claim 24, Russo discloses a device wherein the control part compensates a missing part of a content currently received with the content temporary stored when a subscription command for the content corresponding to the preview is received while the preview stored is playback **[system keeps track of exactly where operator left off (paras. 25, 45) and may store and play programs or parts of programs automatically based on what has been previously viewed (para. 40)].**

Art Unit: 2424

22. Regarding claim 25, Russo discloses a device wherein the control part compensates the missing part of the content currently received further using the stored preview **[system keeps track of exactly where operator left off (paras. 25, 45) and may store and play programs or parts of programs automatically based on what has been previously viewed (para. 40)]**.

23. Regarding claim 29, Russo discloses a device wherein the storage control portion judges whether or not the content is a pre-viewable pay-per-view content in accordance both of description of received ECM and a fact that a valid key is send back as a result of transmitting the ECM to a key reproduction part **[system transmit and receive supplemental storage information, including authorization keys, para. 37]**.

24. Regarding claim 30, Hoffert discloses a device wherein the storage control portion creates a list in which pay-per-view contents that are pre-viewable are listed, and stores the preview of the pre-viewable pay-per-view contents in accordance with the list **[cols. 7-8]**.

25. Regarding claim 36, Russo discloses a receiving device capable of viewing a part of a content as a preview, the device comprising:

a control part conducts one of recording history of viewing the previews and of viewing the content, and outputting the history to outside thereof. **[system will list pre-**

Art Unit: 2424

**recorded contents and viewing history, para. 25; user may review titles of stored content, para. 44; selection history is outputted to program provider, para. 44].**

26. Regarding claim 37, Hoffert discloses a receiving device which receives and stores a content being transmitted, and restores the stored content and outputs the restored content, the device comprising a control part which controls so that one of recording a condition for storing the preview specified by a user and outputting such a condition to outside thereof is conducted while selectively storing a preview having a condition comply with a condition provided by a user **[content is searched based on user criteria, while previews are generated and stored, cols. 19-20].**

27. Regarding claim 38, Russo discloses a device according to claim 37, wherein the control part further controls so that history of command for viewing the stored preview provided by the user is one of recorded and output to outside thereof **[system will list pre-recorded contents and viewing history, para. 25; user may review titles of stored content, para. 44; selection history is outputted to program provider, para. 44].**

28. Regarding claim 39, Russo discloses a device according to claim 37, wherein the control part further controls so that either a command for storing the stored content or the history of command for viewing the stored preview provided by the user is one of recorded and output to outside thereof **[system will list pre-recorded contents and**

Art Unit: 2424

**viewing history, para. 25; user may review titles of stored content, para. 44; selection history is outputted to program provider, para. 44].**

29. Regarding claim 40, Russo discloses a device according to claim 36, wherein the control part transmits to a transmit device either the history or the condition both once stored **[system will list pre-recorded contents and viewing history, para. 25; user may review titles of stored content, para. 44; selection history is outputted to program provider, para. 44].**

30. Regarding claim 41, Hoffert discloses a method of displaying an electronic program guide on a receiving device, the method comprising a step of indicating a display by which a program is pre-viewable to each of pay programs **[col. 23, 1-25; col. 24, 1-13].**

31. Regarding claim 44, Russo discloses a method for managing content broadcasting, the method comprising the steps of:

at a receiving device **[tuner 104, Fig. 2; paras. 19, 29];**

previously storing transmitted by a transmission device into preview of a content, by judging whether or not each content is a pay-per-view content when each content is received **[e.g. col. 26, 60-66]**, and controlling to previously read out a part of each

Art Unit: 2424

content in a plurality of contents alone as a preview when the content is judged as a pay-per-view content **[system determines whether content is pay-per-view and outputs/stores accordingly, paras 44-46]** and to store the preview **[program content previously stored, para. 44],**

determining whether or not a pay-per-view content is currently airing in accordance with information on programs when a user provides a command for subscription according to the stored preview **[paras. 40, 42, 44],** and

transmitting to the transmission device the subscription command of the pay-per-view content when the content is not on-air, at the transmission device **[transmission device receives subscription commands, para. 42, 43];**

receiving commands for subscription from a plurality of receiving devices **[groups of subscribers, para. 20],** and

determining whether or not rerun of the pre-per-view content is carried out according to the number of the subscription commands **[content may be repeated or controlled based on subscriber commands, paras. 26, 45].**

Russo describes a previewing function, but does not "selectively" retrieve and store scenes **[system may make available different storage areas for program and preview information, and system determines whether content is a preview or pay-per-view and outputs/stores accordingly, paras 44-46]**. Hoffert teaches a previewing system wherein the control part at least controls the restoring part, and the control part comprises:



a storage control portion for judging whether or not each content is a pay-per-view content, for controlling the restoring part to select portions from the content received that are predetermined as previewable **[cols. 19-20, II. 32-59; system determines whether content is seekable, whether a media preview is available, etc., cols. 25-26, II. 4-58]** and to create a preview when the content is judged as a pay-per-view content and for selectively storing preview of a previewable pay-per-view content selected from the transmitted content in the storage part **[col. 8; content previews are stored, col. 7, 42-52; step 422, Fig. 4C]**; and

a playback control portion which reads out the preview stored in the storage part and playback and outputs the preview **[step 423, Fig. 4C, step 432, Fig. 4D; cols. 19-20, II. 53-11]**.

In addition to disclosing the various hardware elements as described above, Russo allows a user to select criteria for automatic recording, such as genre, cast, or other user preferences **[paras. 13, 21, 40]**. Russo also suggests the desirability of a preview function that allows users to preview content without incurring a charge. Given these functions of Russo, it would have been obvious to one of ordinary skill that Russo could be modified to take advantage of the more sophisticated metadata and preview creation taught by Hoffert. As Hoffert states, "it is desirable to not only search the lexical content surrounding a media file, but also to search the content of the media file itself." **[col. 7, 60-64]**. Using the previewing capability of Hoffert allows users to focus

Art Unit: 2424

on the portions of a video they want to see, rather than wasting time and manual effort skimming through an entire full-length content.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Russo and Hoffert in view of Yurt et al., U.S. Patent No. 5,132,992. Russo shows compression and decompression but does explicitly show the use of a buffer. Yurt does teach a buffering process that includes a combination of buffering and non-buffering that compensates for real-time or later viewing **[cols. 4-5, 64-9]**. Yurt also describes realigning video data and user addressing of particular content portions **[col. 8, 20-23]**. Moreover, Russo suggests that well-known memory technology may be used to facilitate electronic transmission of data **[para. 32]**. Therefore it would have been obvious to one of ordinary skill in the art to use a buffer as part of the compression, storage, and playback system of Russo in order to match data rates between system components.

32. Claims 31-35 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russo and Hoffert as cited above.

33. Regarding claims 31, 35, and 42, neither Russo nor Hoffert explicitly discloses a display of available capacity for storage. However, Russo strongly suggests the possibility, stating that the user “energizes the apparatus and an accompanying television or monitor, and uses the remote...to review those programs previously

Art Unit: 2424

recorded onto the high-capacity medium” **[para. 44]**. Thus, given that the user can view a database of currently stored programs, it would have been obvious to one skilled in the art to include the total or current available capacity on the display, so the user may decide to download more content, erase content, or some combination thereof.

Generally speaking, it is advantageous to display as much basic information to the user as possible.

34. With respect to claim 35, it has an additional limitation of storing a summarized form of content based on memory capacity. Russo discloses controller 10 which performs storage management, including keeping track of what has been stored and deleting content to maintain memory space. **[paras. 21 and 45]**. At the point where content currently being downloaded exceeds the available memory, the content will exist in a summarized (i.e. incomplete) form.

35. Regarding claim 32, Russo discloses a device according to claim 31, wherein the storage control portion previously records the capacity of each content during storage of the content, and acquires the capacity of each content in accordance with description of the record **[content may be automatically erased based on current memory capacity, para. 45]**.

36. Regarding claim 33, Russo discloses a device wherein the storage control portion outputs another content capable of being stored as a candidate for storage in

Art Unit: 2424

accordance with capacity of each of the content when it is judged that storage for the content to be stored accompanies a trouble **[controller 10 performs storage management, including keeping track of what has been stored and deleting content to maintain memory space, paras. 21 and 45]**.

37. Regarding claim 34, Russo does not specifically teach choosing a compression rate based on storage availability. However, Russo does teach that the compression may advantageously be provided to most efficiently utilize the storage unit 110, and also that compression algorithms may be programmable and updated as necessary **[para. 33]**. Thus, given Russo's suggestion that compression may be adjusted, it would have been obvious to one of ordinary skill to adjust compression rates when memory capacity varies, in order to in order to balance between complex compression (which is processor- and bandwidth-intensive) and available memory space.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2424

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy R. Newlin whose telephone number is (571) 270-3015. The examiner can normally be reached on M-F, 8-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher Kelley/  
Supervisory Patent Examiner, Art  
Unit 2424

TRN